Role Description
Principal Developer - ICT

Cluster	Separate Agency
Agency	NSW Education Standards Authority
Division/Branch/Unit	Information & Communications Technology Directorate
Location	117 Clarence Street Sydney
Classification/Grade/Band	Clerk Grade 11/12
Role number	XXXX
ANZSCO Code	135112
PCAT Code	904
Date of Approval	March 2023
Agency Website	www.educationstandards.nsw.edu.au

Agency Overview

The NSW Education Standards Authority (NESA) is an independent statutory authority responsible for the curriculum, assessment, teacher accreditation and regulatory standards in NSW schools, and accreditation of early childhood teachers. NESA is responsible for developing policies and initiatives for evaluating and improving quality teaching and student learning across all schools and school sectors. NESA was formally established on 1 January 2017, in response to the need to adopt a more strategic and outward-looking focus, greater clarity of regulatory roles and responsibilities, and streamlined processes and systems.

Primary purpose of the role

The Principal Developer ensures that development practices, standards and techniques are understood and adhered to during multiple phases of system development. Lead large or complex application development that facilitates the achievement of business outcomes. Provide expert advice and coaching across technical areas, or deep specialized knowledge in designing and developing native cloud applications using microservices architecture.

Key Accountabilities

- Develop and Manage Development Practice applying best practice methodologies and industry-recognized standards, processes, and systems, including coordination of input from developers across squads to ensure they are clear about the ways of working in a Digital Agile environment.
- Develop and implement specifications, systems design, effective solutions, and tools, exploring different approaches to solving problems, to enable effective delivery and enhanced ways of working.
- Drive the analysis, identification, prioritisation and implementation of improvements and efficiencies to maximise value from services, including the potential for automation of processes, determining costs and benefits of new approaches, managing change, and assisting implementation where needed.
- Plan and allocate resources across squads, including build and integration activities to create operational services and support effective delivery.

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- Utilise technical expertise in the user story capture phase and translate user stories to design approaches that ensure the solution is sustainable and consideration is given to user needs and associated interfaces with other systems, so it is fit for purpose and fit for use in accordance with agreed outcomes.
- Develop, implement, and refine procedures for estimates, then assume technical responsibility for all stages of the software development process to ensure compliance with security and application development standards, communicate them with the team and achievement of documented requirements.
- Monitor and report 3rd-level support of developed applications to reduce the impact of application defects, rework, and related incidents, complying with the change, incident, and problem management processes.
- Analyze and respond to customer feedback and insights and contribute to ongoing improvements to products and service delivery.

Key challenges

- Supporting team members to communicate with and resolve issues across other teams to ensure effective service delivery and the removal of any roadblocks in a dynamic and complex working environment of competing priorities and short time frames.
- Prioritising tasks and requests for information, in a high-volume working environment with competing priorities, to ensure timeframes are met.
- Engaging and consulting with a range of stakeholders, often with diverse needs and interests, to deliver customized digital solutions.

Key relationships

Who	Why
Internal	
Senior Manager	• Escalate issues and seek advice on competing priorities • Regular updates on projects and Initiatives
Manager	• Escalate issues, keep informed, advise, and receive objectives • Determine system requirements and plan for system changes • Agree on system maintenance activities and provide feedback on projects
Work team	• Support team, work collaboratively to contribute to achieving the team's business outcomes • Inspire and motivate the team, provide direction, and manage performance • Review the work and proposals of the project team • Encourage the team to work collaboratively to contribute to achieving the team's business outcomes
Stakeholders	• Respond to queries, identify needs, communicate services and redirect, escalate, or resolve issues. • Enhance efficiency and quality of service to end users.

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Who	Why
External	
Clients/Customers/Vendors	• Resolve issues and provide solutions to problems • Develop and maintain effective working relationships and open channels of communication.

Role dimensions

Decision making

Decisions are made in accordance with the NESA and/or Directorate-documented policies and procedures including the Code of Ethics and Conduct. This role exercises some autonomy within defined parameters of the agreed scope of work and refers to the Manager, any decisions requiring significant variations to agreed outcomes.

Reporting line

The Principal Developer reports directly to the Manager/Product Owner based on the program allocation.

Direct reports : Nil

Budget / Expenditure : Nil

Essential requirements

- Strong software engineering background, including experience in API integration, and building APIs supported by a micro-service architecture.
- Excellent understanding of systems thinking and technical design to deliver end-to-end solutions having good functional knowledge of high availability application service management.
- Proven experience with requirements analysis, design, review, coding, systems integration, and end-to-end understanding of SDLC.

Desirable Skills

- Development experience in building AWS native cloud applications.

Capabilities for the role

The NSW Public Sector Capability Framework applies to all NSW public sector employees. The Capability Framework is available at www.psc.nsw.gov.au/capabilityframework

This role also utilizes an occupation-specific capability set that contains information from the Skills Framework for the Information Age (SFIA). The capability set is available at www.psc.nsw.gov.au/capabilityframework/ICT

Capability Summary

Below is the full list of capabilities and the level required for this role. The capabilities in bold are the focus capabilities for this role. Refer to the next section for further information about the focus capabilities.

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NSW Public Sector Capability Framework		
Capability Group	**Capability Name**	**Level**
Personal Attributes	**Display Resilience and Courage**	**Adept**
	Act with Integrity	Intermediate
	Manage Self	Adept
	Value Diversity	Adept
Relationships	**Communicate Effectively**	**Advanced**
	Commit to Customer Service	**Adept**
	Work Collaboratively	Adept
	Influence and Negotiate	Intermediate
Results	**Deliver Results**	**Adept**
	Plan and Prioritize	Adept
	Think and Solve Problems	**Advanced**
	Demonstrate Accountability	Intermediate
Business Enablers	Finance	Advanced
	Technology	**Adept**
	Procurement and Contract Management	Adept
	Project Management	Adept
People Management	**Manage and Develop People**	**Intermediate**
	Inspire Direction and Purpose	Intermediate
	Optimize Business Outcomes	Advanced
	Manage Reform and Change	Intermediate

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NSW GOVERNMENT

Occupation / profession specific capabilities		
Capability Set	**Category and Sub-category**	**Level and Code**
SFIA	**Development and Implementation, Systems Development, Programming/software development**	**Level 4, PROG**
	Development and Implementation, Installation and integration, Systems integration and build	**Level 5, SINT**
	Delivery and operations, Service operation, Application support	**Level 4, ASUP**

Focus capabilities

The focus capabilities for the role are the capabilities in which occupants must demonstrate immediate competence. The behavioral indicators provide examples of the types of behaviors that would be expected at that level and should be reviewed in conjunction with the role's key accountabilities.

NSW Public Sector Capability Framework		
Group and Capability	**Level**	**Behavioral Indicators**
Personal Attributes Display Resilience and Courage	Adept	• Be flexible, show initiative and respond quickly when situations change • Give frank and honest feedback/advice • Listen when ideas are challenged, seek to understand the nature of the criticism and respond constructively • Raise & work through challenging issues and seek alternatives • Keep control of own emotions and stay calm under pressure and in challenging situations
Relationships Communicate Effectively	Advanced	• Tailor communication to the audience • Clearly explain complex concepts and arguments to individuals and groups • Monitor non-verbal cues and adapt where necessary • Create opportunities for others to be heard • Actively listen to others and clarify own understanding • Write fluently in a range of styles and formats
Relationships Commit to Customer Service	Adept	• Take responsibility for delivering high-quality customer-focused services • Understand customer perspectives and ensure responsiveness to their needs • Identify customer service needs and implement solutions • Find opportunities to cooperate with internal and external parties to improve outcomes for customers • Maintain relationships with customers • Connect and collaborate with relevant stakeholders within the community

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Results Deliver Results	Adept	• Take responsibility for delivering on intended outcomes • Make sure team/unit staff understand expected goals and acknowledge success • Identify resource needs and ensure goals are achieved within budget and deadlines • Identify changed priorities and ensure allocation of resources meets new business needs • Ensure financial implications of changed priorities are explicit and budgeted for • Use own expertise and seek others' expertise to achieve • work outcomes
Results Think and Solve Problems	Advanced	• Undertake objective, critical analysis to draw accurate conclusions that recognize and manage contextual issues • Work through issues, weigh up alternatives and identify the most effective solutions • Take account of the wider business context when considering options to resolve issues • Explore a range of possibilities and creative alternatives to contribute to systems, process and business improvements • Implement systems and processes that underpin high quality research and analysis
Business Enablers Technology	Adept	• Demonstrate a sound understanding of technology relevant to the work unit, and identify and select the most appropriate technology for assigned tasks • Identify opportunities to use a broad range of communications technologies to deliver effective messages • Understand, act on and monitor compliance with information and communications security and use policies • Identify ways to leverage the value of technology to achieve team/unit outcomes, using the existing technology of the business. • Support compliance with the records, information and knowledge management requirements of the organization
People Management Manage and Develop People	Intermediate	• Ensure that roles and responsibilities are clearly communicated. • Collaborate on the establishment of clear performance standards and deadlines in line with established performance development frameworks. • Develop team capability and recognize and develop potential in people. • Be constructive and build on strengths when giving feedback. • Identify and act on opportunities to provide coaching and mentoring. • Recognize performance issues that need to be addressed and work towards resolution of issues.

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Occupation specific capability set (Skills Framework for the Information Age – SFIA)		
Category and Sub-category	**Level and Code**	**Level Descriptions**
Development and Implementation Systems Development	Level 4 - PROG	**PROGRAMMING/SOFTWARE DEVELOPMENT** Designs, codes, verifies, tests, documents, amends and refactors complex programs/scripts and integration software services. Contributes to selection of the software development approach for projects, selecting appropriately from predictive (plan-driven) approaches or adaptive (iterative/agile) approaches. Applies agreed standards and tools, to achieve well-engineered outcomes. Participates in reviews of own work and leads reviews of colleagues' work.
Development and Implementation Installation and integration	Level 5 - SINT	**SYSTEMS INTEGRATION AND BUILD** Identifies, evaluates, and manages the adoption of appropriate tools, techniques and processes (including automation and continuous integration) to create a robust integration framework. Leads integration work in line with the agreed system and service design. Monitors and reports on the results of each integration and build. Designs and builds integration components and interfaces. Contributes to the overall design of the service and the definition of criteria for product and component selection. Contributes to development of systems integration policies, standards and tools.
Delivery and operations Service operation	Level 4 - ASUP	**APPLICATION SUPPORT -** Maintains application support processes and checks that all requests for support are dealt with according to agreed procedures. Uses application management software and tools to investigate issues, collect performance statistics and create reports.